

MICHIGAN DEPARTMENT OF COMMUNITY HEALTH

APRIL 12, 2005

**UPDATE of LABORATORY ALERT: URGENT INFORMATION REGARDING
CAP PROFICIENCY TESTING SURVEYS VR1-A 2005, VR4-A 2005, XL-C
2005.**

We have received further information on the use by CAP of an H2N2 strain (ATCC VR-100) of Influenza A in its 2005 surveys. It is now clear this strain was used in **three** surveys in 2005: **VR1-A 2005, VR4-A 2005, and XL-C 2005**. This strain of Influenza has not been circulating in the North American population since 1967 and is not contained in the current or recent influenza vaccine formulations. As a result, individuals will have limited or no immunity to this strain.

In a letter to state and territorial health officials, the Health and Human Services Assistant Secretary for Public Health Emergency Preparedness yesterday outlined coordination with CAP to address this situation, including distribution of guidelines to laboratories to document destruction of this material. If you received this agent in a CAP survey, you should receive these instructions:

1. **Immediately autoclave, incinerate and treat as hazardous all materials you may have retained or derived from the following proficiency specimens:**
 - a. VR1-05 contained in survey panel VR1A-2005
 - b. VR4-02 contained in survey panel VR4A-2005
 - c. XV-04 and XV-05 contained in survey panel XLC-2005**in a manner consistent with CDC and FDA recommendations and OSHA blood borne pathogen rules**
(<http://www.cdc.gov/od/ohs/biosfty/bmbl/bmbl-1.htm>)
2. **Confirm within 24 hours of specimen destruction to the College of American Pathologists by e-mail or fax that the above mentioned proficiency specimens and all derivatives have been destroyed.**
3. **Monitor laboratory staff who have worked with 2005 survey proficiency specimens VR1-05, VR4-02, XV-04 and XV-05 for influenza-like illness (fever of $>100^{\circ}\text{C}$ and cough or sore throat) and follow up with laboratory testing to determine the etiology of infection. Influenza A infections that are detected in laboratory staff who have worked with these specimens should be reported immediately to national public health authorities and specimens should be retained for testing by national or international reference laboratories.**
4. **Immediately pass this information on to any laboratories to which you may have sent 2005 survey proficiency specimens VR1-05, VR4-02, XV-04 or XV-05 and report this action to the College of American Pathologists by e-mail or fax.**

As of today, there have been no reports of H2N2 infections among laboratory workers handling the H2N2 samples from CAP, although informal accounts and published reports indicate that such infections have occurred in the past, when influenza viruses showing marked antigenic shift or antigenic drift were worked on in the laboratory under less stringent biosafety conditions than are recommended today and especially during work done in the past with experimentally or naturally infected animals. Biological safety cabinets (BSCs) must be used for the processing of clinical specimens when the nature of the test requested or other information suggests the likely presence of an agent readily transmissible by infectious aerosols (e.g., influenza viruses). The proper use of BSCs, along with use of recommended PPE, greatly reduces the chances of laboratory-acquired influenza infections. Given these recommendations it is expected that the likelihood of infection of a laboratorian is low if proper Biosafety Level 2 precautions, including BSC, are used.

The CDC and NIH along with a panel of influenza experts are in the process of drafting changes to the Biosafety and Microbiological and Biomedical Laboratories 5th Edition that may designate influenza viruses of the H2N2 subtype as Biosafety Level (BSL) 3 agents. This change is deemed prudent because of the length of time since this subtype circulated among humans and the consequent waning of immunity and corresponding increase in susceptibility of humans.

Future Viral Culture Surveys will contain only influenza A H1N1 or H3N2 strains deemed appropriate for Biosafety Containment Level 2 until a time when the circulation of influenza A virus subtypes changes. Be sure to contact CAP if you received this agent in one of these surveys and have not received any communication from CAP. Following these guidelines, you should notify CAP within 24 hours that you have destroyed all stocks of this agent.

If you have any questions please contact Patty Clark, Interim Virology Section Manager, Bureau of Laboratories at 517-335-8102 or phone CAP Customer Contact Center at 1-800-323-4040, Option 1.

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